

III. Claims 5-6, drawn to the system for generating an electrochemiluminescent emission, classified in class 422, subclass 52.

IV. Claims 7-8, drawn to the kit for performing an electrochemiluminescent assay, classified in class 435, subclass 4 and subclass DIG 43.

V. Claims 9-12, drawn to the compound comprising an electrochemiluminescent label linked to a coreactant, classified in class 424, subclass 9.6.

Applicants provisionally elect, with traverse, the Group II claims, namely Claims 3-4 for prosecution on the merits.

Applicants further amend and cancel certain claims, as well as add new claims for consideration by the Examiner. Pursuant to 37 C.F.R. § 1.121, a clean set of pending claims is hereby provided below. A marked up version of the amended claim 9 is attached as Exhibit A.

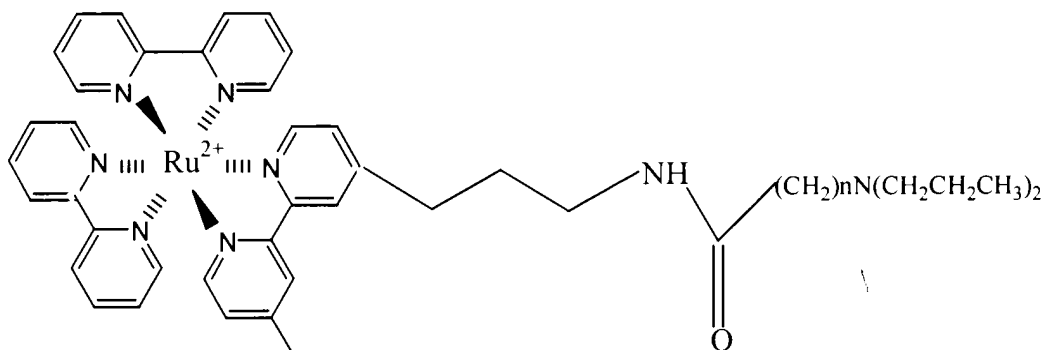
IN THE CLAIMS

Please cancel claims 1, 2, 5, 6, 7, and 8 without prejudice.

B 1 3. A compound which comprises an electrochemiluminescent label linked to a coreactant, such that said compound emits electrochemiluminescence when exposed to electrochemical energy.

Sub 12 4. A compound which comprises an electrochemiluminescent label including a coordinate complex of a metal, which label is linked to an electrochemiluminescence coreactant, such that said compound emits electrochemiluminescence when exposed to electrochemical energy.

- B²
9. The compound of claim 3 having the formula:



10. The compound of claim 3, further comprising a biomolecule.
11. The compound of claim 3, wherein the coreactant is not an analyte of interest.
12. The compound of claim 3, said electrochemiluminescent label is linked to said coreactant by a linkage which comprise one or more linking groups for attachment of biomolecules.

Please add the following new claims:

- B³
13. (New) The compound of claim 3 or 4, wherein said coreactant is an amine.
14. (New) The compound of claim 3 or 4, wherein said coreactant is a tertiary amine.
15. (New) The compound of claim 3 or 4, wherein said coreactant comprises a dipropyl amine moiety.
16. (New) The compound of claim 3 or 4, wherein said coreactant is an N,N-dipropyl amino acid.
17. (New) The compound of claim 3 or 4, wherein said coreactant is NADH.
18. (New) The compound of claim 3 or 4, wherein said coreactant is the hydrolyzed form of a β -lactam antibiotic having a hydrolyzed β -lactam bond.

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B3
19. (New) The compound of claim 3 or 4, wherein said electrochemiluminescent label comprises ruthenium, osmium or rhenium.
20. (New) The compound of claim 3 or 4, wherein said electrochemiluminescent label and said coreactant are linked by an amide bond.
21. (New) The compound of claim 3 or 4, wherein said coreactant is a strong oxidant, a strong reductant, a moiety that upon oxidation forms a strong reductant, or a moiety that upon reduction forms a strong oxidant.
22. (New) The compound of claim 3 or 4, wherein said coreactant is a species capable of interacting with said electrochemiluminescent label to produce electrochemiluminescence or wherein said coreactant is a precursor species which upon exposure to electrochemical energy is transformed into is a species capable of interacting with said electrochemiluminescent label to produce electrochemiluminescence.
23. (New) A method of generating an electrochemiluminescent emission, which comprises exposing the compound of claim 3 or 4, to conditions suitable for inducing electrochemiluminescence.
24. (New) A system for generating an electrochemiluminescent emission, which comprises:
- (a) the compound of claim 3 or 4;
 - (b) an electrode for exposing said compound to electrochemical energy; and
 - (c) a light detector for detecting or measuring luminescence emitted from said compound for a composition containing same.